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ABSTRACT

The costly supplemental or alternative programs that combat chronic school failure and continued high dropout rates are not always effective for the following reasons: (1) students do not always find out which programs are available, and (2) if no suitable program is available, there is usually no one responsible for trying to create one. People with local responsibility for dropout prevention should use an efficient procedure for assessing the situations of individual students and referring them to the most suitable program. Students drop out for numerous reasons, and there are numerous possible responses to students at risk of dropping out. Dropout prevention programs offer various curricula, including the following: (1) regular academic curriculum leading to local diploma; (2) remedial academic curriculum leading to diploma equivalent; (3) specialized vocational program leading to job placement; and (4) combined academic and vocational curricula. Dropout programs vary in their locations (regular high schools, other schools, non-school organizations), instructional processes, administrations, ranges of related activities, and schedules. A comprehensive assessment system should be developed to better match students with the available programs. A 35-item bibliography is appended. (BJV)

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DROPOUT PREVENTION AND RECOVERY
IN CALIFORNIA

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I. INTRODUCTION

Since 1983 the public elementary and secondary schools of California have been engaged in great efforts to upgrade academic standards. Expenditure per pupil, adjusted for inflation, has increased. Higher CAP and SAT scores, along with bigger enrollments in academic subjects, are signs that the money and effort are paying off. At the same time, many observers and participants want to make sure that all students benefit, not only the children of relatively affluent parents (Brown and Haycock, 1984). The resulting tension is felt in California and other states where academic standards are also growing stiffer (McDill and others, 1985).

It is likely that expenditure per pupil, adjusted for inflation, will continue to increase for another year or longer. Concern about chronic school failure and continued high dropout rates in some places will translate into proposals for costly new programs. This paper provides background information for judging proposals to reduce high school dropout rates. The assumption here is that the state's primary interest in raising high school graduation rates is to increase the sum of intellectual competence among today's teenagers. The state also has a responsibility to guard against inequity in the distribution of public funds or public school diplomas.

In 1985 the state enacted S.B.65, which is creating educational clinics and outreach consultants in local districts. A new High Risk Youth Liaison Unit in the Department of Education also was created in 1985. This unit is carrying out S.B.65, and providing other assistance to local districts with programs for dropout prevention and recovery.

The state is also supporting ten replications of the Sequoia Union High School District's Peninsula Academies, where academic and occupational interests have been effectively combined.

For years the state has also supported continuation schools, work experience programs, vocational education, and other supplemental or alternative programs for dropouts or potential dropouts. Other public agencies, notably those concerned with occupational training, also provide more educational options for individuals of high school age.

The problem is not an obvious lack of expenditure or effort to help students earn high school diplomas or pass high school equivalency exams. The problems are (1) that individual students or groups of students in particular places do not always find out which supplemental or alternative programs are already available to them; and (2) if no suitable program is available, there is not usually anyone responsible for trying to create one.

To remedy this situation at a local level, it is necessary to keep current information about supplemental or alternative programs which are already available to local students. Section III of this paper explains various features of programs that exist in various places. A local outreach consultant, or a School Attendance Review Board, could use such a listing of features offered in each program available locally. Whoever has local responsibility for dropout prevention and recovery -- in some places no one is responsible, but in an increasing number of places someone is -- could also use an efficient procedure for assessing students' situations and referring them to the most suitable program. The next section describes the multiplicity of reasons why students drop

out, and procedures for assessment and matching are brought up again in Section IV.

Local authorities can use help from the state in this effort to coordinate existing programs. They can use even more help in creating new ones where these are warranted. Where large numbers of students are not learning or are dropping out, major changes are in order. One kind of change would provide more support for students to meet high academic standards (McDill and others, 1985).

Another kind of change that is warranted, especially at the high school level, would create a kind of education that is intellectually rigorous but also quite different from conventional high school classes. The Peninsula Academies point in this direction, as do some school-based enterprises, e.g., Foxfire (Wigginton, 1986). Creating a choice of challenges for all high school students would help dispel their prevailing apathy (Coleman and Husen, 1985; Stern and others 1985a) as well as keeping more of them interested in school. The importance of challenge is emphasized by Bronfenbrenner (1986):

From a developmental viewpoint, adolescence is a time of challenge - a period in which young people seek activities that will serve as outlets for their energy, imagination, and longings. If healthy and constructive challenges are not available to them, they will find their challenges in such peer-group-related behaviors as poor school performance, aggressiveness or social withdrawal (sometimes both), school absenteeism or dropping out, smoking, drinking, early and promiscuous sexual activity, teenage parenthood, drugs, and juvenile delinquency (p. 433).

Enabling local schools to provide each student with a suitable combination of challenge and support is a worthy aim of state policy for dropout prevention and recovery.

II. VARIOUS REASONS WHY STUDENTS WITHDRAW FROM SCHOOL

There are many reasons why students drop out without high school diplomas. Written reports on etiological research all emphasize the multiplicity of causes. McDill and others (1985) write of "multiple causes of dropping out," which they group into "factors" related to school, current family obligations or conditions in the family of origin, and the lure of paid work (pp. 418-419). In California, the Assembly Office of Research (1985) summary said "Students drop out of school for a variety of reasons: they are not succeeding in school, they want to work, or they are pregnant," and they run out of time or desire to pass the required courses and the local tests of minimum proficiency. A literature review for the Association of California Urban School Districts (1985) listed twenty known characteristics of dropouts, grouped as cognitive, affective, family, and demographic. The State Department of Education summary lists twenty-four personal and family-related characteristics sometimes associated with dropping out, and twenty-five school-related variables. Some of the school variables are obvious warning signs that a student is on the way to dropping out: absenteeism, truancy, frequent tardiness, poor or declining grades, low test scores, limited extra-curricular participation, disruptive or rebellious behavior, discipline/suspension/expulsion problems, and others (High Risk Youth Liaison Unit, 1985).

Early versus Late Age of Onset

The usual rubrics for grouping characteristics of dropouts may contain mixtures of causes, symptoms, and symptoms that become causes. For instance, McDill and others (1985) include teenage pregnancy among the "family conditions" associated with dropping out. But the high school junior who becomes pregnant may be an overdependent daughter of middle-class parents, who has always done poorly in school and now creates another problem. Or she may be a college-bound cheerleader for an urban high school who never learned about ovulation and fertility. Whoever she is, pregnancy will probably delay her progress through school. To avoid becoming a dropout, the second girl might need just a year off followed by a good independent study program leading to a regular diploma. The other might also benefit from a self-paced academic program possibly combined with other services if funds allow. Knowing the problem is teenage pregnancy does not tell us what to do about it.

These hypothetical cases do illustrate the importance of knowing when the problems begin. Some students are doing fine until they get into trouble as adolescents. Some students have done poorly since the primary grades, including many who were not intellectually impaired when they entered school. For these, some kind of early intervention or change would have been warranted, and later intervention may be more costly. The distinction between early and late onset is important for understanding causes. It also is important for planning programs, if certain kinds of early and late onset are concentrated in certain locations.

Unfortunately, some discussions of what to do about dropouts have dealt with the multiplicity of causes by trying to reduce them to a common denominator, which tends to be an early onset condition. For instance, the California Urban School Districts' task force participants, "based on the practical long-term experiences of their districts, were unanimous in their agreement with the literature -- the single most outstanding feature of a dropout is a history of failure in school" (p. 1; emphasis added). This suggests early onset. The report further states that "the large majority of dropouts start in remedial tracks in the elementary grades." Treadway (1985) also chose to emphasize early onset and early interventions.

This is unfortunate because statistical evidence about early onset has been misinterpreted, occasionally by the researchers themselves. For example, Lloyd (1978) constructed a regression model to predict whether or not a student graduated from high school on time, using information on each student in third grade. This model gave correct predictions for 76.7 percent of the students. That may sound like a high degree of accuracy, but it is less accurate than prediction based on no model at all. In the group Lloyd studied, 78.3 percent of the students did finish high school on time. Simply "predicting" that every student graduates on time would have produced 78.3 percent correct predictions!

Quay and Allen (1982) caution against the temptation to rely on predictive models for designing interventions, in part because the percentage of correct predictions by most models does not exceed the percentage that could be obtained with no model at all. Lloyd's study is a case point. Another is a study by Wehlage and Rutter (1984). As cited by Treadway (1985), they found "the strongest predictor of students' eventual decision to drop out was . . . their expectation of educational achievement" (1985, p. 6; emphasis by Treadway). Treadway used this theme in his discussion of early intervention programs. But the Wehlage and Rutter model was for predicting persistence among high school sophomores, from the High School and Beyond Survey. Their Table 2 reports 67 percent correct predictions. Using no model at all, the percentage of correct predictions would be 86, since only 14 percent of this High School and Beyond sample of sophomores did drop out (National Center for Education Statistics, 1984). Unless predictive models do better than no model at all, their practical use is "problematic," as Quay and Allen (1982) put it.

Quay and Allen also mention the costs of incorrect predictions. If a student is "predicted" to be a dropout, the labelling itself has consequences, not all of them helpful for the child. On the other hand, it does not help to ignore obvious symptoms that a student is having trouble.

In sum, age of onset is important, but neither statistical models using early data on students, nor models using later data, generally make more accurate predictions than those produced with no model at all. Whether most dropouts in fact leave for reasons that arise early or late is still an open question.

Reasons and Responses

In practice, students who are misbehaving or failing in school do receive extra attention from teachers, principals, counselors, and sometimes psychologists or other specialists. Public schools must accept virtually all children, and the Education Code is thick with the built-up legislative output from generations of reformers and interest groups concerned about the treatment of those children who do poorly in school. Special funds are available for certain prescribed purposes. All these laws and prescriptions limit and guide the attention of school professionals. They must report on their activities in terms of the laws which authorize them.

However, beneath the bureaucratic terminology is a practical understanding that has also developed over time. While legally authorized programs produce aggregate data, person-to-person practice develops an experienced know-how. As Mann (1986) observes, most aggregate data does not incorporate practitioners' understanding. This communication gap hinders practical improvement of procedures for dropout prevention and recovery. The problem is how to blend data with know-how, to design better techniques for responding to children at risk.

The California Urban School Districts' report emphasized early onset of school failure. Standardized achievement tests also show higher proportions of elementary schools below national norms in low-income urban areas than in rural or suburban places. The problems of low income, unemployment, racial and cultural discrimination, language barriers, and accompanying conditions that beset many urban schools probably affect children even before they are born, and

certainly from birth. Confronting this set of early problems afflicting whole communities of children is a constant challenge for the schools and everyone else.

In rural areas children face common problems at a later age, as they become aware of the dominant urban culture. One teacher in Nevada Joint Union High School District said their alternative school finds students suffering from culture shock. Students' anxiety about their place in the big world drives some of them away from regular schools.

Anxiety, along with excitement, is a common feeling among adolescents. They are excited and anxious about finding their place as adults. Schools have much responsibility for the intellectual side of preparation for adulthood. But schools are part of an institutional framework — including minimum wage and child labor laws — which also limits teenagers' opportunity to experience "real life." High school students are fully aware of this. Many resent the school for treating them "like children," adding to the difficulty of becoming adult. Some drop out or attend only when they feel like it, while many just drift along, not making waves but also not learning much. (See Wehlage, 1983; Coleman and Husen, 1985; Stern and others, 1985a.) Solutions to this problem include creation of alternative programs that connect academic work more closely to students' practical concerns, and restructuring regular school routines to avoid wasting students' time.

Urban poverty, rural isolation, and adolescent anxiety affect whole groups of students. Other problems of a more ontogenetic nature also cause students to withdraw from school. Mental retardation, specific learning disorders, and psychosocial abnormalities may be congenital. Family stress can damage very young children. Family

crises also occur when children are older, and can disrupt the lives of high school students who previously did well in school. Other reasons why previously successful students may withdraw from high school include pregnancy, pressure to earn money, or desire to spend large amounts of time on something other than regular school — hacking with computers, rock-climbing, or whatever. The Assembly Office of Research found a large number of California dropouts actually start their senior year in high school but then come out a few units short and do not get diplomas.

In responding to any of these situations, there are various options. The best response would depend on whether this is an individual case, or a problem affecting a whole community. What kind of supplemental or alternative program, if any, is warranted? Should the objective be to get students through regular high school classes, to cover the same subjects in a different way, or to try remediation aimed at passing a high school equivalency examination? What about individual or group counseling? Should the student get some work experience — for pay, course credit, both, or neither? What kind of instructional process is likely to work best, group or individual? What kinds of staff are required? Where and when should all of this take place?

As these questions imply, there is a multiplicity of possible responses to students who seem headed toward dropping out or have already done so. This makes sense because of the multiplicity of causes. The next section describes various features of existing dropout prevention and recovery programs. The last section returns to the issue of how schools decide what response is warranted in different situations.

III. VARIOUS FEATURES OF PROGRAMS FOR DROPOUT PREVENTION OR RECOVERY

Most programs have several parts. For instance, Project HOLD, a well-publicized exemplary program which originated in Pajaro Valley Unified School District, offers peer counseling, attendance monitoring, parent counseling, and classroom guidance. For any particular student, one or two of these features may be much more important than the others. And the particular combination of features that is most effective in Pajaro Valley may not be the most suitable package in another location. In general, for purposes of state policy or local planning, it is useful to consider program elements one at a time. Then, instead of considering whether to replicate Project HOLD or other exemplary programs in pre-packaged form, the question becomes whether a particular feature should be added to the programs already available.

What follows is a partial listing of program elements. The order in which elements are listed here is arbitrary, and the list could be extended or refined. However, this list does describe six major dimensions of programs for dropout prevention or recovery. Along each dimension there are several possibilities. Any program can therefore be represented as a six-dimensioned package. Given the choice of features listed here along each dimension, it would be possible to design 25,920 distinct programs, each with a different combination of features! Since choices on some dimensions are not mutually exclusive, the number of conceivable programs is even larger than 25,920. The point is that a vast array of different programs are possible.

To illustrate the features on this list, reference will be made to actual programs for which there is some evidence of success. However, since the evidence of success pertains to the program as a whole, it is not possible to know which particular features or combination of features actually accounts for the program's success.

Curriculum and Objective

A basic dimension of programs for dropout prevention or recovery is the nature of the curriculum. The major possibilities here are a regular academic curriculum leading to a local high school diploma, a remedial academic curriculum leading to a diploma equivalent, a specialized vocational curriculum leading to job placement, or a combination of vocational with regular or remedial academic.

Regular academic curriculum leading to local diploma. An example here is the Oakland Street Academy, founded in 1973, and administered by the Bay Area Urban League under contract with the Oakland Unified School District. Although many of its students are former dropouts, the Street Academy's CAP scores for 1982-83 were above the Oakland district average. Another example is the Welcome Back project in Elsinore Union High School District. In 1981, students in this project reportedly achieved a 50 percent gain in credits earned toward graduation, compared to their baseline rate of credit accumulation.

Remedial academic curriculum leading to diploma equivalent. Educational Clinics Incorporated has operated its clinics for dropouts in the State of Washington since 1976. As of 1982, the major academic objective was to pass the G.E.D. examination; 52 percent of 1,824 participants between 1976 and 1982 had achieved the objective

(Educational Clinics Incorporated, 1982; p. 33). Demonstration of the clinic model in California is now underway, pursuant to SB 65 of 1984 (E.C. Section 58550 et. seq.). Educational Clinics Incorporated will operate two of the nine demonstration sites. Preparation for the G.E.D. examination in California is also offered by many other programs, including adult schools, some community colleges and continuation high schools, as well as non-school programs such as the California Conservation Corps and its local counterparts (e.g., San Francisco, Marin, and East Bay Conservation Corps).

In California, an alternative to the G.E.D. is the California High School Proficiency Examination (C.H.S.P.E.). An individual who passes C.H.S.P.E. receives a certificate from the state, which is legally equivalent (in California) to a local high school diploma. (see Stern, 1982; Assembly Office of Research, 1985; and the section of this report by Andrea Leiderman.) Passing C.H.S.P.E. is explicitly stated as an objective of some continuation school, independent study, and other programs. An example is Project STOP in Ceres Unified School District.

Specialized vocational curriculum leading to job placement.

Within the California public educational system, specific job training is provided mainly by Regional Occupational Centers and Programs (ROC/Ps), and by community colleges. Both of these are available to individuals over age 18 who have not obtained a high school diploma or equivalent. Sixteen and seventeen year-olds who have not graduated from high school may attend ROC/P even if they are not enrolled in a regular or continuation high school — provided that they satisfy the Education Code requirements for continuation education. More commonly, ROC/P students are also enrolled at a regular or continuation high school,

where they attend classes part of the day. It is also possible for high school students to enroll concurrently in a community (or four-year) college, in order to take vocational (or academic) courses.

Regular academic combined with vocational. Many California students take vocational courses in addition to regular academic subjects. The vocational courses may be taken at ROC/P's or, more frequently, at the regular high school itself -- though many vocational classes in the high schools are introductory or exploratory, and do not prepare students for actual jobs (Stern and others, 1985b). In these conventional arrangements, the academic and vocational subjects are self-contained, with no explicit relation between them. For instance, teachers do not use problems in the vocational classes to apply concepts taught in the academic classes.

However, significant efforts are currently underway to integrate academic and vocational subjects more closely. One well-documented example in California is the Peninsula Academies program. This consists of a Computer Academy housed at Menlo-Atherton High School and an Electronics Academy at Sequoia High School, both in Sequoia Union High School District. Both enroll students in grades 10 through 12. Recruitment of students gives priority to those who are economically or educationally disadvantaged and have records of poor attendance and underachievement. Integration of the academic and vocational curriculum is an essential part of the program. Teachers worked together to plan the sequence of topics in each course so that the courses would continually reinforce each other. For instance, during one four-hour period for juniors at the Electronics Academy, the study of direct current circuits in electronics class coincides with analysis of

electric motors in science class, while in math class the students are given Ohm's Law as an example in their study of algebra, and the English class practices capitalization using the electronics lab manual (American Institutes for Research, 1984, p. 56.) This integration of theory and practice apparently makes sense to the students, and presumably accounts in part for the reduction in their dropout rate (Reller, 1985). With state funds to support replication, the Academies model in its entirety is now being copied at ten locations.

Another effort to integrate academic and vocational subjects is being undertaken by vocational educators in high schools and ROC/P's. This effort is a direct response to the high school graduation requirements contained in SB813 of 1983, and to the model graduation requirements promulgated by the State Board of Education in the same year. Neither set of requirements includes vocational education. Furthermore, the new requirements reduce the amount of time available for students to take electives, including vocational education. Grossman and others (1985) found the number of vocational courses offered in high schools did decline between 1982-83 and 1984-85. In response, vocational educators in some districts have won school board approval to count certain vocational courses as alternatives to fulfill graduation requirements. For instance, students who complete courses in agriculture, drafting, auto mechanics, or word processing may obtain full or partial credit toward meeting graduation requirements in life science, mathematics, physical science, or English, respectively. The California Advisory Council on Vocational Education (1985) has described the equivalencies worked out in several districts. This does not represent such close integration between academic and vocational as at

the Peninsula Academies, but it may produce more connection between the two than in the conventional arrangements, where academic and vocational courses are not systematically related to each other at all.

Remedial academic combined with vocational. Some school-based programs offer vocational training along with remedial academic instruction geared to the G.E.D. or C.H.S.P.E. Project STOP in Ceres Unified is an example.

However, much of the impetus for this kind of program has come from employment-related training efforts sponsored by the state and especially by the federal government outside of schools. The federal Economic Opportunity Act of 1964 created the Job Corps, which has now survived more than two decades of changing administrations, massive shifts in strategies for dealing with unemployment, the coming and going of CETA and YEDPA with their panoply of programs for employment and training, the coming of JTPA in 1982, and, most remarkably, the ebbing of popular commitment toward redistributive programs of any kind. Job Corps has survived in part because it has been found to produce benefits greater than its costs (see Taggart, 1981). In its 20-year history, Job Corps has evolved an effective educational program for young people who are not in school, most of whom are not high school graduates. The program is individualized and competency-based (see section on Instructional Process, below). For participants who test at grade level 7.5 or above when they enter the program, the academic objective is to pass the G.E.D. Ninety hours of Job Corps instruction has been found to produce average gains of 1.5 years in reading achievement and 1.0 years in mathematics (Taggart, 1981, p. 124).

The kind of intensive techniques developed by the Job Corps for combining vocational training with academic remediation are now being widely diffused through programs sponsored by the federal Job Training Partnership Act (JTPA). Programs for youth under JTPA must meet performance standards defined in terms of three kinds of competence: pre-employment and work maturity, basic education, and job-specific skills. Schools that operate programs with JTPA funds are therefore obliged to adopt this competency-based approach to vocational and remedial academic instruction. For example, the Los Angeles Unified School District's Manpower Development program has produced several volumes of competencies to be used in JTPA training. The volume on Basic Education Competencies contains more than a hundred "benchmarks" for assessing students' skills in reading, writing, and mathematics. For instance: "The trainee is able to put two consonants together and make a new sound." "The trainee identifies and writes sentences with subject and verb agreeing in number and person." "The trainee adds, subtracts, multiplies, and divides decimal fractions." Other volumes produced by the same office cover vocational English as a second language, pre-employment skills used in machine shops, and specific skills for clerical occupations.

Location/Auspices

A second major dimension along which programs vary is where they are located. For participants of high school age, the main choices are the regular high school, another school facility, or some place other than a school.

Regular high schools can be the site of programs for dropout prevention. To the extent that dropping out is a response to a negative climate in the regular high school itself, dropout prevention must happen there (see section on Instructional Process, below). Or, if the problem originates in the students rather than in the climate of the high school, but the aim is to help students get back into regular classes, there are advantages in locating dropout-prevention-or-recovery programs at the regular school site (Robbins, Mills, and Clark, 1981). It is also possible that the program for dropouts or students at risk will be so good that it becomes a positive asset to the regular high school. The Peninsula Academies may have such an effect. Finally, the regular high school may simply be the most convenient or economical place to house a program for actual or potential dropouts.

Other school sites include continuation high schools, adult schools, ROC/P's, and community colleges. Each of these locations may appeal to young people who are averse to the regular high school for some reason. Continuation high schools are usually small and cozy, compared to large comprehensive high schools. ROC/P's, adult schools, and community colleges treat students more like grown-ups. In addition, some individual students simply want to avoid the regular high school because of certain other people there.

Non-school organizations are especially important as program sites for young people who have already left school without graduating. Educational Clinics Incorporated, which operates remedial academic programs for this group, describes its location in the downtown business district of Everett, Washington as "a storefront facility which as once conveys the feelings of intimacy and professionalism" (Educational

Clinics Inc., 1982). Some young people who are not willing to set foot in a school will enter here. The same could be said of other non-school programs, such as the Center for Employment Training in San Jose, or San Francisco Renaissance.

Non-school sites are necessary if the program includes activities that do not take place in schools, in particular paid employment. Some programs induce young people to remedy their academic deficiencies by providing paid jobs. Conservation corps programs, for example, often require participants to spend one day a week preparing for high school equivalency examinations. High schools themselves use this strategy when they enforce California laws allowing young people to work longer hours only when they are enrolled in a formal work experience program, which therefore requires that they be enrolled in high school.

Instructional Process

Another basic difference among programs is that some keep students in classroom groups but try to transform social relations in the classroom, while other programs are completely individualized. Often these two approaches are combined, with individuals all working on their own separate learning contracts, but meeting together in a group for instruction and social support.

Transforming social relations in the classroom has been a major objective of several programs chosen for replication through the National Diffusion Network: Project Intercept in Ossining, New York; the FOCUS program in Hastings, Minnesota; and Project PASS in Pinellas County, Florida. For instance, Intercept began with 30 hours of workshops for classroom teachers, to broaden their repertory of

techniques for classroom management, constructive discipline, and instruction using the multiple modalities of sight, sound, touch, movement, and listening. Continued assistance of this kind enabled teachers to improve the climate of regular high school classes, and to "establish a therapeutic remedial academic program for a large number of disruptive potential dropouts" who are placed in separate classes (Maurer, 1982).

The purpose of these interventions is to break the vicious cycle of rebellion and repression that can destroy the climate for learning. Instead of the trust and mutual respect between teachers and students which are necessary for learning to take place, the pathological classroom becomes a scene of psychological warfare. Students heckle while teachers lecture. Sarcasm replaces self-disclosure. Teachers feel compelled to be authoritarian and sometimes arbitrary (Rollings, 1985; Wehlage, 1983). Students out classes (Moos and Moos, 1978). The healthy classroom is quantitatively and qualitatively different. Gold and Mann (1984, pp. 61-66) present striking quantitative evidence that in successful programs for disaffected students the interaction consists mainly of students initiating and teachers responding -- in contrast to conventional schools, where most of the time teachers initiate and students respond. This is one indication of students taking more responsibility for their own learning.

An unusual qualitative account of the process involved in creating a constructive classroom climate for disruptive students has been provided by Newton, Greenwood, and Sagan (1985). They operated alternative classrooms in two junior high schools in Multnomah County, Oregon, during 1982-83. Students placed in these classrooms were not

identified as emotionally or educationally handicapped, but they had caused so much trouble in regular classes that they were on the verge of being expelled. The alternative classrooms were their last chance, and the students knew it. Since this situation is similar to some continuation high schools and other programs in California, it is worth considering the process in some detail. The report by Newton and others provides an explicit psychological theory of what constitutes a healthy classroom, and includes description in students' own words, written during lessons in class or in journals after school.

Giving students an opportunity to write down their responses to class assignments, and then to read them aloud, enables them to reflect on their own behavior. This helps them take responsibility for their own actions instead of blaming others for what happens to them. For instance, a student wrote,

"I came in the room after lunch a little rambunctious . . . I was not listening . . . but I got the assignment right after the third time. The first two times I wasn't and I pulled myself together and listened to you." (p. 187; emphasis added)

Rather than seeing themselves as victims of capricious authority when they are punished for something, students are given enough respect and support so that they can own up to what they have done:

"I had to pay a price in P.E. My decision was to say a bad word. The results were to do 100 push-ups." (p. 188; emphasis added)

Part of enabling students to acknowledge their own responsibility is to help them see alternatives available to them in a given situation.

"If what happened yesterday started again, the only thing I would do the same is laugh . . . What I would do differently is sit quiet and not heckle." (p. 202)

The theory and techniques used in the Multnomah project, which Newton and his collaborators call Creative Behavior, is intended to enhance students' capacity for rational problem-solving in psychosocial matters:

"If I hit him the problem would be over but there will be another problem I would have to deal with and that is what would happen."
(p. 207)

The same process of clear labelling and rational reflection also helps students deal with academic matters:

"The . . . math was hard because I don't understand how to divide decimals too well. I have trouble when the divisor is a decimal."
(p. 217)

Respect for students, helping them take responsibility, and providing alternatives are features of healthy classrooms in many places. One distinctive feature of the Creative Behavior method used in the Multnomah project is its emphasis on "integration": enabling students to recognize what they have learned and to believe they are really more capable than they were before. Students integrate by writing, and by regularly celebrating their improvement:

"I feel I earned my celebration real good and all I have to do is make up one assignment and I will get the celebration. The things I did to make this happen was I got all caught up in my work and I didn't get another half-day suspension from spitting on someone."
(p. 212)

In the Multnomah project and other efforts to transform classroom social dynamics, the long-run purpose is to help students function appropriately in regular situations, not for them to become dependent on the support of the alternative program.

Complete individualization is another possibility. Some students cannot attend classes because they have to work full time, take care of children, or have other demands on their time. Other students are simply not willing to participate in group instruction, whether in a conventional or alternative classroom. In California it is possible for students to pursue the regular course of study for a high school diploma, or to do remedial work in preparation for the G.E.D. or C.H.S.P.E., using the mechanism of independent study. This mechanism also enables school districts to count students as part of A.D.A. even if they are not attending school (see Stern and other, 1985a; Department of Finance, 1985).

The California Consortium for Independent Study (C.C.I.S.) is a nonprofit, member-supported organization comprised of teachers and administrators of independent study programs. The 1985 C.C.I.S. member directory includes capsule descriptions of more than 90 programs throughout the state. Many districts now have independent study centers, and a few have self-contained high schools where all students are enrolled through independent study. C.C.I.S. publishes a handbook with practical advice on how to organize a program and keep track of individual contracts. However, despite its flexibility and usefulness as a means to reach students who have left school without diplomas, independent study has never been vigorously promoted by the state, and it still accounts for less than one percent of statewide A.D.A.

Individual learning contracts combined with group instruction and social support is a very common approach. Students are not completely on their own, as they are with independent study, but the curriculum is individualized so that students can each progress at their own pace.

They spend some time working alone, some time in groups working on academic matters, and some time in group discussions of psychosocial issues (see section on Related Activities, below). Examples of programs using this combined approach include the Oakland Street Academy, Educational Clinics Incorporated, Satellite Academy in New York CNTB (Foley and Crull, 1984), and Project Welcome Back in Elsinore Union High School District. Many continuation high schools also combine individualized instruction with group classes.

Programs offering self-paced, individualized instruction -- including both completely individualized independent study and programs where students spend some of their time in groups -- now employ a varied assortment of instructional materials and record-keeping procedures. Some are home-made, others are purchased. The state could provide useful technical assistance here, ensuring that all programs have access to the most suitable materials. For instance, some programs might make more effective use of techniques developed by the Job Corps for academic remediation.

Staff

Who runs the program has everything to do with the kind of program it is. The state has no law or policy regarding preparation of specialists in:

- "therapeutic remedial academic programs" (Maurer's phrase);
- "clinic" programs not regulated by SB65 of 1985 (E.C. 58550 et seq.);
- techniques for dealing with disruptive students who are not identified as handicapped or disadvantaged;

- independent or individualized study programs;
- teaching "basic education competencies" or "pre-employment and work maturity";
- continuation high schools; or
- other programs for dropout prevention or recovery.

The state could strongly influence these programs by establishing new certification procedures, but that would be unwarranted, in the absence of agreement about what effective practitioners need to know. It would be useful to gather more information on this subject, especially from practitioners. The state could also sponsor the preparation of these practitioners.

Currently most of the professional staff in programs for dropout prevention or recovery are certificated secondary teachers or counselors in public schools. We have seen no data describing how staff are usually assigned, but reports of individual programs often assert the benefit of letting teachers volunteer. It seems self-evident that voluntary assignment makes for closer compatibility between teachers' professional interests and the program's purposes. In fact, teachers are often the entrepreneurs who create programs and make them go.

People other than certificated teachers or counselors also work in dropout prevention or recovery programs. Some non-certificated teachers provide instruction in employment-related programs operated by non-school agencies or firms. Parents, peers, police, job supervisors, "mentors", and social service workers also play formal roles in some programs.

Related Activities

Instruction is not the only activity in programs for dropout prevention or recovery. Other services are sometimes provided, combined with instruction or by themselves. The two activities other than instruction which occupy large amounts of participants' time are counseling and work. Each of these can take various forms.

Counseling can be provided to students as individuals or in groups. Project Intercept also provides family counseling; this is unusual.

Most counseling for individual students is probably provided informally, by trusted teachers. Formal one-to-one counseling is expensive. Any extended one-to-one counseling in a public school program ordinarily would require special education funding, which entails identifying recipients as disabled in some way. Therefore, when most of the California alternative schools and programs reported to the Assembly Office of Research in 1982 that they were "counseling based", they probably meant mainly either informal or group counseling. (For discussion of this survey, see Stern and others, 1985a.)

Group counseling can cover a range of personal, interpersonal, academic and career issues, from how to save a suicidal friend to applying for jobs or college admission. Most dropout prevention or recovery programs that keep participants in groups include discussion of this kind. Group counseling can strengthen students' attachment to the program, and thereby promote persistence (Foley and Crull, 1984). Project FOCUS in Hastings, Minnesota includes a small group class called Family. In programs for disruptive students like the Multnomah project (Newton and others, 1985), academic instruction is almost inseparable

from group counseling. In various formats, group counseling is sufficiently widespread in the schools that curricular materials have been developed to guide discussions (for instance, see Gerler, 1986).

Work of some kind is the other major activity in dropout prevention or recovery programs. Students may receive pay or course credit, or both, or neither.

In California public schools, students in formal "work experience" programs receive academic credit in connection with paid jobs. State law now requires each student to have at least one hour a week of related instruction in order to receive academic credit for work experience, but this is not strongly enforced. (For further discussion of the work experience program, see Stern and others, 1985a; also Department of Finance, 1984). Students in "cooperative vocational education" also receive academic credit in connection with paid jobs (see Lotto, 1982 for examples of effective programs). In cooperative vocational education, the teacher in a particular course ordinarily is responsible for relating the student's experience on the job to material covered in the classroom. In contrast, coordinators of work experience programs have supervisory responsibility for students to whom they do not teach any regular class. Integrating on-the-job experience with regular course content is therefore more problematic in the work experience program than in cooperative vocational education.

Unpaid work or service is also a feature of some programs. California ROC/P's place students in "community classrooms" (i.e., businesses) where students observe and learn, for which they get academic credit but no pay. Some regular high schools also award credit for unpaid work experience. An example is the Career-Links program in

Amador Valley Joint Union High School District, which places students mainly in profit-seeking firms. Unpaid work for nonprofit organizations is also included in the curriculum of some programs. Atlanta, Georgia public schools have gone so far as to require every student, before graduating from high school, to provide 75 hours of service to an approved nonprofit agency of the student's choice. Students receive credit for a course called "Duties to the Community."

In programs for the "marginal high school student", Wehlage (1983) has emphasized the educational importance and effectiveness of an "experiential curriculum", which may involve students in political/social action, community study, or producing goods or services. Boyer (1983) urged expansion of activities that allow all high school students to do something genuinely and immediately useful for other people. Such activities sometimes are sponsored by schools themselves. Foxfire is a famous example (Wigginton, 1986). Restaurants, recycling centers, and child care services where most of the work is done by students are not uncommon (Kohler, 1981). Providing opportunities for students to be useful is analogous to improving the overall climate in a high school; it benefits all students, but can be especially important in keeping some students there at all.

Schedule

A program's schedule constrains its activities and influences the composition of its students. The options here are straightforward:

full-time versus part-time, and short-term versus long-term.

Full-time programs occupy the same amount of students' time each week as regular secondary school: five or six hours a day, five days a

week. Self-contained alternative schools may operate on a full-time basis. The Oakland Street Academy does, though its daily schedule starts at 8:45 and ends at 12:45 so that students can hold afternoon jobs. Many continuation school students attend full time, though by law they are only required to go part-time (see Department of Finance, 1985).

In most programs that operate full-time, students ordinarily are expected to enroll for a full semester or longer. However, some short-term programs also may occupy students full time. Many schools have created detention centers or "time-out rooms" as alternatives to suspension. Students who out or disrupt classes are sent to these places for periods of time ranging from a few minutes to several weeks. They spend the time on assignments given by their regular teachers, and sometimes they are directed to write plans for correcting their behavior. It is claimed that students benefit more than if they were suspended. The school district also receives credit for the students' attendance. Examples of these alternatives to suspension are the TAP Center in Milpitas, the OASIS Project at Jepson Junior High School in Vacaville, the detention room at Redwood High School in Larkspur, and the time-out room of Project PASS.

Part-time programs may be self-contained: for instance, continuation schools. They may also be combined with the regular school program. Detention classes and ROC/P classes are examples of programs designed to be taken alongside regular classes.

IV. MATCHING STUDENTS WITH PROGRAMS

The multiplicity of causes and possible treatments for dropping out creates the necessity for matching students with programs. At present, this is not usually done in a very systematic way. Programs that offer individualized instruction must assess their students' strengths and weaknesses, but these assessments are not designed to tell which of all the possible program features described above would be most suitable for each student. Only a few places have developed any kind of comprehensive assessment, to determine what combination of program features would be best for individuals or groups of students. Comprehensive assessment can be used as the basis for referring students to existing programs, or for developing new programs.

An example of a program that does thorough assessment of students in kindergarten or first grade is the Early Prevention of School Failure project, which started in Peotone, Illinois and has spread through the National Diffusion Network. A program that provides assessments for high school age students is Educational Clinics Incorporated (ECI), which relies mainly on the Peabody Individual Achievement Test (PIAT). Joyce Shepard, a teacher for ECI, describes how she assesses learning modalities:

During the general information part of the PIAT, I ask questions of a general nature. When a student asks me to repeat the questions, and has difficulty understanding the questions, he might be exhibiting some auditory confusion . . . Ideally, tests should be used to determine what element of auditory reception is impaired. This type of student should not be in a class where the teacher, primarily, lectures. The input would be scrambled, so would his test answers. Other students have great difficulty with

the reading comprehension part of the test. This could show visual memory or perception problems. Probably, for this person, a teacher who lectures would be perfect. Sometimes, the auditory and visual are weak. We then have to bring in the tactile senses to help with the memory and comprehension. (Letter to David Stern, February 9, 1986.)

Other programs do other kinds of assessment. Employment-related programs do a lot of testing for career awareness and occupational preferences. Programs funded by special education do extensive cognitive and sometimes affective assessment.

The problem is not a shortage of tests and diagnostic instruments. The problem is how to use them efficiently to decide what combination of program features would be best for a given student. In San Juan Unified School District, project New Start offers a comprehensive assessment covering cognitive level and styles, career interests, situational variables and attitudes toward dropping out. Kern High School District has created a new administrative structure to match students with programs and develop new programs. Grossmont Union High School District has drafted a plan for identifying students at risk and systematically matching them with appropriate treatments. These efforts are in the early stages. Other districts will be trying to do these things as a result of S.B.65 of 1985. To avoid duplication of effort, the state could convene the pioneering practitioners and distill their wisdom in a form that would be useful wherever there are dropouts.

Bibliography

- American Institutes for Research (1984). Replication Guide for the Peninsula Academics. Palo Alto, CA: AIR.
- Assembly Office of Research (1985). Dropping Out, Losing Out: the High Cost for California. Sacramento, CA: Joint Publications Office, State Capitol.
- Association of California Urban School Districts (1985). Dropouts from California's Urban School Districts: Who Are They? How Do We Count Them? How Can We Hold Them (or at Least Education Them)? Los Alamitos, CA: Southwest Regional Laboratory for Educational Research and Development.
- Boyer, Ernest L. (1983). High School: a Report on Secondary Education in America. New York: Harper and Row.
- Bronfenbrenner, Urie (1986). Alienation and the Four Worlds of Childhood. Phi Delta Kappan, 67(6): 430-436.
- Brown, Patricia R. and Kati Haycock (1984). Excellence for Whom? Oakland, CA: The Achievement Council.
- California Advisory Council on Vocational Education (1985). Opportunities for Vocational Education in the Educational Reform Act of 1983 (Senate Bill 813). Sacramento, CA: CACVE.
- Coleman, James S. and Torsten Husen (1985). Becoming Adult in a Changing Society. Paris: Organisational for Economic Cooperation and Development.
- Department of Finance (1985). Alternative Education. Sacramento, CA: Program Evaluation Unit, Department of Finance.
- Educational Clinics Incorporated (1982). Description and Results of the ECI Program. Seattle, WA: ECI.
- Foley, Eileen and Peggy Crull (1984). Educating the At-Risk Adolescent. More Lessons from Alternative High Schools. New York: Public Education Association.
- Gerler, Edwin R., Jr. (1986). Skills for Adolescence: a New Program for Young Teenagers. Phi Delta Kappan, 67(6): 436-439.
- Gold, Martin and David W. Mann (1984). Expelled to a Friendlier Place. Ann Arbor: University of Michigan Press.
- Grossman, Pam, Michael W. Kirst, Worku Negash, Jackie Schmidt-Posner, and Michael Garet (1985). Curricular Change in California Comprehensive High Schools: 1982-83 to 1984-85. Berkeley, CA: PACE Project, School of Education, University of California.

- Kohler, Mary C. (1981). Developing Responsible Youth Through Youth Participation. Phi Delta Kappan, 62: 426-428.
- Lotto, Linda S. (1982). The Holding Power of Vocational Curricula: Characteristics of Effective Dropout Prevention Programs. Journal of Vocational Education Research, 7(4): 39-48.
- Lloyd, D.W. (1978). Prediction of School Failure from Third-Grade Data. Educational and Psychological Measurement, 38: 1193-1200.
- Mann, Dale (1986). Can We Help Dropouts: Thinking about the Undoable. Forthcoming in Teachers College Record, 87(3).
- Maurer, Richard E. (1982). Dropout Prevention: an Intervention Model for Today's High Schools. Phi Delta Kappan, 63: 470-471.
- McDill, Edward L., Gary Natriello, and Aaron M. Pallas (1985). Raising Standards and Retaining Students: the Impact of the Reform Recommendations on Potential Dropouts. Review of Educational Research, 55(4): 415-433.
- Moos, R.H. and B.S. Moos (1978). Classroom Social Climate and Student Absences and Grades. Journal of Educational Psychology, 70: 263-269.
- National Center for Education Statistics (1984). High School and Beyond, a National Longitudinal Study for the 1980's. Two Years in High School: the Status of 1980 Sophomores in 1982. Washington, D.C.: U.S. Department of Education.
- Newton, Fred E., Jay Greenwood, and Juanita B. Sagan (1985). Alternatives to Failure: Resources for Improving Teaching. Portland, OR: Multnomah Education Service District.
- Quay, Herbert C. and Laurel B. Allen (1982). Truants and Dropouts. Encyclopedia of Educational Research (5th ed.), Volume 4, pp. 1958-1961. New York: The Free Press.
- Reller, Dorothy J. (1985). The Peninsula Academies, Interim Evaluation Report, 1984-85 School Year. Palo Alto, CA: American Institutes for Research.
- Robbins, Jeffrey, Stephen Mills, and William Clark (1981). Alternative Programs -- Sometimes They Work, Sometimes They Don't. National Association of Secondary School Principals, Bulletin, 65(445): 48-56.
- Rollings, J.W. (1985). Increase School Holding Power by Improving School Climate. California School Boards Journal, 44, July/August, pp. 15-17.
- Stern, David (1982). On the Value of Options for High School Students: Some Findings and an Analysis of Policy. Educational Evaluation and Policy Analysis, 4(1): 33-46.

Stern, David, James Catterall, Charlotte Alhadeff, and Maureen Ash (1985a). Reducing the High School Dropout Rate in California: Why We Should and How We May. Berkeley, CA: California Policy Seminar, University of California.

Stern, David, E. Gareth Hoachlander, Susan Choy, and Charles Benson (1985b). One Million Hours a Day: Vocational Education in California Public Secondary Schools. Berkeley, CA: PACE Project, School of Education, University of California.

Taggart, Robert (1981). A Fisherman's Guide, an Assessment of Training and Remediation Strategies. Kalamazoo, MI: Upjohn Institute.

Treadway, Peter G. (1985). Beyond Statistics: Doing Something about Dropping Out of School. Stanford, CA: Stanford University.

Wehlage, Gary G. (1983). Effective Programs for the Marginal High School Student. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Wehlage, Gary G. and Michael Rutter (draft, 1984). Dropping Out: How Much Do Schools Contribute to the Problem? Forthcoming in Teachers College Record, 87(3), Spring 1986.

Wigginton, Eliot (1986). Sometimes a Shining Moment: the Foxfire Experience. New York: Doubleday.